ABSTRACT OF SANITARY REPORTS.

Vol. VIII. WASHINGTON, D. C., APRIL 21, 1893.

No. 16.

TREASURY DEPARTMENT, U. S. Marine Hospital Service.—Published in accordance with act of Congress approved February 15, 1893.

UNITED STATES.

National quarantine regulations for the maritime ports of the United States.

The following letter relates to the quarantine regulations approved April 4, copies of which will be mailed to all quarantine and health officers:

TREASURY DEPARTMENT.

OFFICE OF SUPERVISING SURGEON-GENERAL M. H. S.,

Washington, D. C., April 4, 1893.

SIR: I have the honor to inclose herewith a set of rules for the government of all quarantine stations at the maritime ports of the United States framed in accordance with the act of Congress approved February 15, 1893.

As showing the right to make these rules under said law, I beg leave to invite your attention to the first four lines of section 4, which state, "That it shall be the duty of the Supervising Surgeon-General of the Marine-Hospital Service, under the direction of the Secretary of the Treasury, to perform all the duties in respect to quarantine and quarantine regulations which are provided for by this act."

Section 3 of the same act provides as follows:

SEC. 3. That the Supervising Surgeon-General of the Marine-Hospital Service shall, immediately after this act takes effect, examine the quarantine regulations of all State and municipal boards of health, and shall, under the direction of the Secretary of the Treasury, cooperate with and aid State and municipal boards of health in the execution and enforcement of the rules and regulations of such boards and in the execution and enforcement of the rules and regulations made by the Secretary of the Treasury to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, and into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia; and all rules and regulations made by the Secretary of the Treasury shall operate uniformly and in no manner discriminate against any port or place; and at such

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April 21, 1893.

ports and places within the United States as have no quarantine regulations under State or municipal authority, where such regulations are, in the opinion of the Secretary of the Treasury, necessary to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, and at such ports and places within the United States where quarantine regulations exist under the authority of the State or municipality, which, in the opinion of the Secretary of the Treasury, are not sufficient to prevent the introduction of such diseases into the United States, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, the Secretary of the Treasury shall, if in his judgment it is necessary and proper, make such additional rules and regulations as are necessary to prevent the introduction of such diseases into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, and when said rules and regulations have been made they shall be promulgated by the Secretary of the Treasury and enforced by the sanitary authorities of the States and municipalities, where the State or municipal health authorities will undertake to execute and enforce them; but if the State or municipal authorities shall fail or refuse to enforce said rules and regulations the President shall execute and enforce the same and adopt such measures as in his judgment shall be necessary to prevent the introduction or spread of such diseases, and may detail or appoint officers for that purpose.

In the circular letter of the Secretary of the Treasury dated February 24, 1893, promulgating the rules to be observed with regard to vessels at foreign ports and on voyage, the statement is made that additional regulations for the government of the domestic ports will be promulgated hereafter.

In accordance with section 3 of the law, I have made inquiry into the rules and regulations of the various ports of the United States and have found a want of uniformity, and that the quarantine practice at some of the ports is insufficient. To declare, however, that the regulations of a given port are insufficient, it becomes necessary to establish a minimum standard, the law contemplating that while such additional requirements may be made by the respective ports as may seem necessary, no port should be conducted in accordance with rules of less efficiency than the standard adopted.

Uniformity of domestic quarantine has been a long-sought desideratum on the part of State and local quarantine officers and heretofore has failed of accomplishment. The new law, however, furnishes a basis for said uniformity.

To assist me in the task imposed, I summoned the following named medical officers of the Marine-Hospital Service as a board to formulate under my directions the regulations to be presented to yourself for adoption, namely:

Surg. H. W. Austin, United States Marine-Hospital Service, chairman; Surg. H. R. Carter, United States Marine-Hospital Service; Passed Assistant Surg. J. J. Kinyoun, United States Marine-Hospital Service, Passed Assistant Surg. H. D. Geddings, United States Marine-Hospital Service.

Dr. Austin has been in charge of the quarantine division of the Marine-Hospital Bureau for more than two years.

Dr. Carter has had large quarantine experience in the South, and is recognized as an authority on all quarantine matters pertaining to Southern ports.

Dr. Kinyoun is a skilled bacteriologist, and had experience last fall in the disinfection of ships in New York Harbor, and is familiar with the immigration business as conducted at Ellis Island.

Dr. Geddings is also an expert bacteriologist with large quarantine experience.

This board having prepared a set of rules, with your consent and to secure cordial cooperation I summoned a conference of the quarantine officers of the principal ports upon the Atlantic and Gulf coasts, namely:

Dr. Charles Meserve, health officer, Portland, Me.; Dr. Samuel H. Durgin, port physician, Boston, Mass.; Dr. Charles H. Fisher, secretary State board of health, Providence, R. I.; Dr. Frank W. Wright, health officer, New Haven, Conn.; Dr. William T. Jenkins, quarantine officer, New York, N. Y.; Dr. Ezra M. Hunt, secretary board of health, Trenton, N. J.; Major Moses Veale, health officer, Philadelphia, Pa.; Dr. Benjamin Lee, secretary State board of health, Philadelphia, Pa.; Dr. James P. McShane, commissioner of health, Baltimore, Md.; Dr. Willard Springer, port physician, Wilmington, Del.; Dr. William A. Thom, quarantine officer, Norfolk, Va.; Dr. H. B. Horlbeck, health officer, Charleston, S. C.; Dr. J. Y. Porter, State board of health, Key West, Fla.; Dr. W. H. Brunner, health officer, Savannah, Ga.; Dr. R. W. Hargis, health officer, Pensacola, Fla.; Dr. S. R. Olliphant, president board of health of Louisiana, New Orleans, La.; Dr. R. M. Swearingen, State health officer, Austin, Tex.; Dr. G. A. Ketchum, president board of health, Mobile, Ala.; Dr. W. C. Curtis, quarantine physician, Wilmington (Southport), N. C.

All invited were present excepting the health officer of Portland, Me., who, however, sent a communication; and a representative from Mobile, whose absence was caused by illness.

This conference met March 16 and 17, 1893. The rules prepared in the Bureau were presented, thoroughly discussed, and voted upon, and several points of difference were adjusted. The meeting was entirely harmonious. After adjournment of the conference the board continued in session, and the results of its labors, the rules and regulations which I submit herewith, have been revised by myself.

I believe that they are as nearly perfect and uniform as can be made at the present time, and I have respectfully to request that they may be promulgated by yourself in the manner set forth in the circular prepared for your signature.

I have the honor to remain, respectfully, yours,

WALTER WYMAN,

Supervising Surgeon-General M. H. S.

To the Hon. SECRETARY OF THE TREASURY.

Promulgation of foreign quarantine regulations-Continued.

Official notification has been received that the quarantine regulations made by the Secretary of the Treasury have been posted in the offices of the United States consuls at the following-named ports for ten days: London and Liverpool, England; Marseilles, France; Tampico and Piedras Negras, Mexico; Antwerp, Belgium; Cork and Queenstown, Ireland; Amsterdam and Rotterdam, Holland; Edinburgh and Dundee, Scotland; Port Sarnia, Canada; and Matanzas and Sagua la Grande, Cuba; Cadiz; Nogales, Mexico; Rome, Bergen, Leghorn; St. Johns, Quebec; Sheffield, Newcastle-on-Tyne; London, Ontario; Dublin, Limerick, Belfast, Londonderry, Acapulco, Cognac, Leeds, Cardiff, Llanelly, Newport, Milford Haven, Bristol, Gloucester, Nantes, St. Pierre Martinique, Ghent, Brussels, Gibraltar, Paris, Bordeaux, Stuttgart, Riga, Toronto, Matamoras, Constantinople, Maracaibo, Hamilton, Bermuda, Panama; Sherbrook, Canada; Clifton, Ontario; Port Rowan, Canada: Charlottetown, Prince Edward Island; Amherstburg, Ontario; St. Galle, Paso del Norte; St. Stephens, New Brunswick; Nassau, New Providence; Nottingham; Roubaix, France; Wallace, Nova Scotia; Grao de Valencia; Nuevitas, Cuba; Plymouth, Vera Cruz, Geneva; St. Christopher, West Indies.

Reports of States, and yearly and monthly reports of cities.

California—San Francisco.—Month of March, 1893. Estimated population, 330,000. Total number of deaths, 529, including phthisis pulmonalis, 86; enteric fever, 3; smallpox, 1; scarlet fever, 8; diphtheria, 9; and croup, 3.

Oakland.—Month of March, 1893. Estimated population, 60,000. Total number of deaths, 80, including phthisis pulmonalis, 10; eroup, 1; and whooping cough, 1.

Sacramento.—Month of March, 1893. Estimated population, 30,000. Total number of deaths, 38, including phthisis pulmonalis, 5; and enteric fever. 2.

Colorado—Denver.—Month of March, 1893. Estimated population, 83,000. Total deaths, 131, including phthisis pulmonalis, 13; enteric fever, 1; scarlet fever, 11; diphtheria, 1; and croup, 1.

CONNECTICUT.—Month of March, 1893. Reports to the State board of health from 166 towns, having an aggregate population of 782,367, show a total of 1,309 deaths, including phthisis pulmonalis, 147; small-pox, 1; enteric fever, 17; scarlet fever, 31; diphtheria and croup, 52; measles, 10; and whooping cough, 11,

MARYLAND—Baltimore.—Month of March, 1893. Population, 455,-427. Total deaths, 853, including phthisis pulmonalis, 91; enteric fever, 11; diphtheria, 19; croup, 2; measles, 4; and whooping cough, 7.

MASSACHUSETTS—Brockton.—Month of March, 1893. Estimated population, 30,000. Total deaths, 54, including phthisis pulmonalis, 7; and eroup, 5.

Northampton.—Month of March, 1893. Population, 16,400. Total deaths, 21, including 1 from scarlet fever.

Worcester.—Month of March, 1893. Estimated population, 93,000. Total deaths, 168, including phthisis pulmonalis, 14; scarlet fever, 3; diphtheria, 2; croup, 3; and whooping cough, 6.

MICHIGAN.—Week ended April 8, 1893. Reports to the State board of health, Lansing, from 70 observers, indicate that erysipelas, remittent fever, and bronchitis increased, and that inflammation of bowels decreased in area of prevalence. Diphtheria was reported present during the week at 23 places, scarlet fever at 51, measles at 22, and enteric fever at 9 places.

NEW HAMPSHIRE—Manchester.—Month of March, 1893. Estimated population, 48,500. Total number of deaths, 77, including phthisis pulmonalis, 8; and croup 1.

OHIO—Cleveland.—Month of March, 1893.—Estimated population, 290,000. Total number of deaths, 493, including phthisis pulmonalis, 35; enteric fever, 14; scarlet fever, 8; diphtheria, 8; croup, 10; and whooping cough, 1.

RHODE ISLAND—Newport.—Month of March, 1893. Estimated population, 20,000. Total number of deaths, 28, including phthisis pulmonalis, 1; and croup, 1.

TENNESSEE—Memphis.—Month of March, 1893. Estimated population, 61,500. Total number of deaths, 50, including phthisis pulmonalis, 28; enteric fever, 2; and scarlet fever, 1.

Publications received.

Annual Report of the Health Department of Baltimore, Maryland, 1892.

Annual Report of the Department of Health of the City of Minneapolis, Minnesota, 1892.

MORTALITY TABLE; CITIES OF THE UNITED STATES.

Cities. Page No. 2013			Loun ,	Deaths from—										
	Population, U	Total deaths	Phthists pul- monalis.	Yellow fever.	Smallpox	Varioloid.	Cholera.	Typhusfever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping	
New York, N. Y	Apr. 15	1, 515, 301	1,091	135					7	4	20	35	4	10
Philadelphia, Pa	Apr. 8	1,046,964	506	81			*****	200000		-	4	10	i	1 3
Baltimore, Md	Apr. 15	434, 459	181	27			*****					3	2	1
San Francisco, Cal	Apr. 8	298, 997	129	23						ī	3	2		
Cincinnati, Ohio	Apr. 14	296, 908	119	16						_	1	3	2	
Cleveland, Ohio	Apr. 8	261, 353	81	6						5	i	1		
Cleveland, Ohio	Apr. 15	261, 353	108	15		*****				5	i	1	******	*****
New Orleans, La	Apr. 8	242, 039	109	19			*****			i				1
Pittsburg, Pa	Apr. 8	238, 617	104	10						2	3	3	6	
Washington, D. C	Apr. 8	230, 392	96	13			*****			-			2	
Milwaukee, Wis	Apr. 15	204, 468	77	7			*****			2	******	1	ī	*****
Minneapolis, Minn	Apr. 8	164, 738	45	3			*****			_	1			*****
Louisville, Ky	Apr. 15	161, 129	57	2			*****			2	i	1	1	
tochester. N. Y	Apr. 15	133, 896	57	8			******			î	2	4	******	
rovidence, R. I	Apr. 15	132, 146	79								2	i	2	
ndianapolis, Ind	Apr. 15	105, 436	36				*****				ī	2	-	
Coledo, Ohio	Apr. 14	81, 434	21										*****	
tichmond, Va	Apr. 8	81, 388	42	8			*****						******	
Nashville, Tenn	Apr. 15	76, 306	36	7			******			-				
Fall River, Mass	Apr. 14	74, 398	42				******							
Erie, Pa	Apr. 15	40, 634	11	2			******							
Portland, Me	Apr. 8	36, 425	15				*****				*****		*****	****
Singhamton, N. Y	Apr. 15	35,005	12	1			******						*****	
fobile, Ala	Apr. 8	31,076	13	6			******					1	*****	
alveston, Tex	Apr. 7	29, 084	12				*****						*****	
uburn, N. Y	Apr. 8	25, 858	ii									1	*****	*****
an Diego, Cal	Apr. 1	16, 159	5	1			******				_	-		****
an Diego, Cal	Apr. 8	16, 159	2										*****	*****
Pensacola, Fla	Apr. 8	11, 750	6				*****					*****	*****	*****

Table of temperature and rainfall, week ended April 17, 1893.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temp	Fahrenhe		Rainfall in inches and hun- dredths.					
Zovany.	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency			
New England States:									
Eastport Me	39		- 1	.72		.4			
Portland, Me	38	2	-	.50	. 30				
Northfield, Vt	42	1	*************	.00		***********			
Manchester, N. H	41	1	***********	,70	***************************************	***************************************			
Roston Mass	45	1	***************************************	.70	************	.1			
Boston, Mass Nantucket, Mass		***********	1	. 85	************				
Block Island, R. I	42	************	2	. 63	.57	**********			
Now London Conn	44	***********	4	.70	1.30	**********			
New London, Conniddle Atlantic States :	46	*********	0	. 89	.01	*********			
Albana N V	40			***					
Albany, N. Y New York, N. Y	46	************	2	. 58	.02	**********			
New York, N. Y.	48	**********	0	.77	1.08	**********			
Philadelphia, Pa	50	***********	0	. 69	.51	**********			
Atlantic City, N. J	47	************		.77	.33	**********			
Philadelphia, Pa Atlantic City, N. J Baltimore, Md	53	***********	3	.76	.04	***********			
washington, D. C	00	***********	1	.70	**********				
Lynchburg, Va	55	************	2	.74		1. 14			
Washington, D. C. Lynchburg, Va. Norfolk, Va.	56	**********	0	.98	***********				
outh Aughtic States:				-		1"			
Charlotte, N. C	60	***************************************	4	. 84	. 21	***********			
Raleigh, N. C	57	1	*************	. 51	. 29	**********			
Wilmington, N. C	61	1		.71	************				
Unarieston, S. C.	63	3	******	. 98	*************				
Augusta, Ga	64	4	*****************	.90	***************************************				
Savannah, Ga	66	3	************	.96	***************************************				
Jacksonville, Fla	69	5		.70	***************************************				
Titusville, Fla	71	1		. 47	.33				
Jupiter, Fig.	74		0	.58	1.67	**********			
Key West Fla	76	2		,28	1.01	***********			
Key West, Fla		-	***************************************		************				
Atlanta, Ga	62		2	. 86					
Pensacola, Fla	68	***************************************	ō	. 89	*************				
Mobile, Ala	68		0.	1, 26					
Montgomery Ala	66	2		1.26	***********	1			
Montgomery, Ala Vicksburg, Miss	67	1	1	1.54	0.6				
Now Orleans To	01	*************	0	1.26	.86	**********			
New Orleans, La	70	************			1.74	***********			
Shreveport, La	68 .	**********	2	1.33	.17	**********			
Fort Smith, Ark	62	***************************************		1.40	***************************************				
Little Rock, Ark	63	*************		1.12	. 68	******			
Calestine, 1ex	67		1	.98	*************				
Gaiveston, Tex	70	************	0	.70	.90	*********			
Galveston, Tex	70		0	, 83	.17	**********			
nio Valley and Tennessee :		2	************	.31	*************				
Memphis, Tenn	62	************	2	1.33	1.57	*********			
Nashville, Tenn			2	1.19	1.71				
Chattanooga, Tenn	61		1	1,05	2.05	***********			
Knozville, Tenn Louisville, Ky	59	1	*************	1.22	.08	********			
Louisville, Ky	57	***************************************	3	1.05	1.55	*********			
Indianapolis, Ind Cincinnati, Ohio	52	***********	2	.80	1.70				
Cincinnati, Ohio	53		3	.70	1.20	**********			
Columbus, Ohio	50	***********	2	. 64	. 46				
Columbus, Ohio Pittsburg, Paake Region :		**********		. 63	. 57	**********			
Oswego, N. Y	42	*************	2	. 49	.31	************			
Rochester, N. Y.	43	***********	1	.61	.29				
Buffalo, N. Y	40	***************************************	0	.56	.44				
Erie, Pa	43	1		. 60	.50				
Cleveland Ohio	44	2		. 49	.17				
Sandusky, Ohio	45	3		.56	.84	************			
Sandusky, Ohio Toledo, Ohio	46		0	.49	.31	***********			
Detroit, Mich	46		0	.49	.31	***********			
Port Huron, Mich	41	3			.68				
Alpena, Mich.	37	2		40	.01	*********			
Marquette Mich	36	-	2	.49	1/	***********			
Marquette, Mich	42	***************************************	2	. 43	.47				
Grand Haven Mich	44	************	1	. 56	.04				
Grand Haven, Mich	44	**************	3		.07	***********			
Chicago, Ill	45	************	1	.63	.03	**********			
		***********		- 11	483				

^{*}The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multipled by seven.

Table of temperature and rainfall, week ended April 17, 1893-Continued.

Locality.	Tempe	Fahrenhe	degrees it.	Rainfall in inches and hun- dredths.					
	Normal.	*Excess.	*Defic'ncy.	Normal.	Excess.	Deficiency			
Upper Mississippi Valley :									
St. Paul, Minn	46		10	. 53	.77				
La Crosse, Wis.		*************	5	. 42	.48	************			
Dubuque, Iowa	* 48	*************	4	.63	.77	***************************************			
Davenport, Iowa	49		3	.57	1.63	*************			
Des Moines, Iowa	50	***************************************	6	.52	2100	.0			
Keokuk, Iowa	52			. 63					
Springfield, Ill			3	.66	2,24	*****************			
Cairo, Ill	59	***************************************	1	.91	1.19	.00.00			
St. Louis, Mo†	57	************	3	.77	1.43	**************			
Missouri Valley:	0,	*************			1. 10	*************			
Springfield, Mo	57		3	.93	.07				
Kansas City, Mo	55	***************************************	3	.72	.38	***************			
Concordia, Kans	58	***************************************	3	.76	. 00	.7			
Omaha, Nebr	51		3	70	******				
Vankton & Dak	47		5	.70					
Yankton, S. Dak Valentine, Nebr	47		7	.49					
Huron, S. Dak	46	*************	9	.56	1,34				
Pierre, S. Dak	48		10	.42	.18				
Extreme Northwest:	10	***********	10	. 40	.10	**************			
	40		10	40	1.01	C - SC			
Moorehead, Minn	40			. 49		***************************************			
St. Vincent, Minn	36	************	10	.28	. 62	************			
Bismarck, N. Dak	42	***************************************	10	.53	***************************************				
Fort Buford, N. Dak	43	***************************************	9	.28					
Rocky Mountain Slope :	1								
Havre, Mont		************	9	. 21	*******				
Helena, Mont	45	**********		28	*************				
Rapid City, S. D.	46		8	.44	10	1			
Spokane, Wash	49	***************************************	9	. 28	.12	********			
Walla Walla, Wash Winnemucca, Nev	55		9	.35					
Winnemucca, Nev	48	***************************************		.26	**************				
Salt Lake City, Utah	51	***************************************	9	.56	***********				
Cheyenne, Wyo		***************************************		. 35	***************************************				
North Platte, Nebr		***************************************		. 55	************				
Denver, Colo	48			. 47					
Montrose, Colo	49	***************************************		. 42	***************************************				
Pueblo, Colo†	51	***********	7	. 42	*************				
Dodge City, Kans	54	***************************************	2	.35	***********				
Abilene, Tex	64	2	***************************************	1.06	***************************************				
Santa Fe, N. Mex		**********	6	. 21	*******				
Fort Stanton, N. Mex		***************************************		.14	*********				
El Paso, Tex	64	**************		.07	***********				
Tueson, Ariz	65	************	5	.07	***********				
Pacific Coast:	-		-	-					
Olympia, Wash	49	************		.77	.78	***********			
Portland, Oregon	53	************		. 72	************				
Roseburg, Oregon	52	***************************************		. 63	******				
Eureka, Cal	50			.86	******				
Red Bluff, Cal	60	**************		, 56	************				
Sacramento, Cal	59			. 65					
San Francisco, Cal	. 56			.50					
Fresno City, Cal	62	***********		. 32	************				
Keeler, Cal	. 59			.14					
Los Angeles, Cal	60	************		.42					
San Diego, Cal			. 3	. 21	************				
				.00					

[•] The figures in these columns represent the average daily departure. To obtain the average weekly departure these should be multiplied by seven.

† Missing.

FOREIGN.

(Reports received through the Department of State and other channels.)

UNITED STATES CONSULATE HAMBURG.

Circular .- Notice to vessel owners and shippers.

For the more convenient inspection of vessels and their cargoes, when bound for any port in the United States, it is desired that all ship-owners and shippers will observe the following requirements which are necessary under the new quarantine law of the United States, now in force.

Notice must be given to the consulate in each case of the sailing date

and place of departure seventy-two hours before sailing.

As far as possible a classification of cargo in accordance with list below will be observed, and shippers are notified that a compliance with the requirements given in each case is necessary to the furnishing of a bill of health and consular invoices.

CLASS A requires neither inspection nor disinfection, if properly

cased to prevent moisture incident to shipment, and consists of:

All new and dry textiles (wool, cotton, or linen), musical and scientific instruments, new furniture, ales, wines, liquors, live animals, cane and rattan ware, books and printed matter, china, glass, porcelain, precious stones and jewelry, fancy goods, toys, art goods, grains, plants, and seeds, india and hard rubber, ivory, leather, and leather goods, manure, salt, and kainit, metal, metal goods, and hardware, explosives, Portland cement, salt, silks, tobacco, and cigars, and such others as may be added hereto from time to time by the medical inspector of the United States Government. This class applies to absolutely new goods only. Glue stock (?) prepared by chloride of lime belongs to Class A.

CLASS B.—Subject always to inspection and if need be disinfection—decision resting with the undersigned. This class should therefore be listed if possible three or four days prior to sailing in order that no

delay may be caused the shipper of the vessel.

Sugar of all kinds, coffee, bristles, feathers if new, horse and other animal hair, unmanufactured wool, canned food stuffs of all kinds, dextrine, dried fruits and vegetables, eggs and albumen, fresh fruits, moss and moss litter, rags, jute, gunny, raw hides and skins, rennets, guts, and bladders, wood pulp and cellulose. All second-hand goods with out exception, and all others not included in Class A or Class C.

CLASS C .- Articles which are forbidden entry into the United States

while any infectious or contagious disease exists in Europe:

Second-hand goods, such as upholstered furniture, feather beds, down quilts, clothing, except such as may be personal wearing apparel ac-

companying owner.

It is desired (and the cooperation of shipowners and merchants is earnestly solicited in this direction) to increase the scope of Class A as much as possible, and to this end the careful and cleanly packing to secure dryness is solicited.

The disinfection in Class B, when required, will consist of steam when the same can be used, and articles which can be passed without disinfection from this class will be passed. Consular authentication of the origin of such goods from a noninfected locality will greatly facilitate such passing free, and often obviate even an inspection.

Sugar and coffee, under most circumstances, will not be molested in

the least.

The attention of passenger steamers is particularly called to Class C, which is simply intended to cover the dirty and dangerous household effects of steerage passengers, and it is requested that all such agencies be notified not to allow shipment to Hamburg of such matter, as the shortest way to stop this class of goods.

The object of this circular being to expedite commerce, and not to delay, all shippers are earnestly requested to furnish invoices promptly,

so that no delay may ensue.

Hamburg, April, 1893.

W. R. ESTES,

United States Consul.

J. H. WHITE,

Passed Assistant Surgeon, U. S. M. H. S., Medical Inspector.

Relative to the publication of sporadic cases of cholera in Hamburg.

UNITED STATES CONSULATE, Hamburg, March 31, 1893.

SIR: Referring you to my dispatch, No. 23, of March 26, 1893, I have the honor to transmit herewith the translation of the Hamburg Senate's reply to the petition of Hamburg shipowners, which declines to discontinue the publication of sporadic cases of cholera. The same was sent to me by Burgomaster Versmann, chief of the department of foreign affairs, 'upon whom I called in relation this matter immediately after writing my aforementioned dispatch, No. 23. It will be seen that the views expressed in the Senate's answer, which was given subsequent to my interview with the burgomaster, are almost identical with those given by me to the Department.

I am, sir, your obedient servant,

W. R. ESTES, United States Consul.

To the Hon. WILLIAM F. WHARTON,
Assistant Secretary of State.

[Inclosure.]

HAMBURG, March 30, 1893.

Referring to a recent conversation which I had with your honor regarding the publication of such sporadic cases of cholera which might yet occur, I beg to hand you, inclosed, a copy of the reply made by the Senate to the petition of the shipowners Rob M. Sloman & Co. et al., and John Suhr.

With renewed assurances of the highest respect,

VERSMANN.

Hon. W. R. ESTES,

Consul of the United States of America.

[Translation.]

HAMBURG, March 29, 1893.

The Senate, on the petition of (1) Rob M. Sloman & Co. et al., (2) John Suhr, regarding the discontinuation of the publication of sporadic cases of cholera, decrees as follows:

The request can not be complied with.

The petitioners are agreed with that it appears deplorable that not-withstanding the good condition of health in Hamburg, the governments of some foreign states employ against vessels coming from Hamburg damaging quarantine regulations as soon as a single case of cholera has occurred. This hampering or damaging of commerce can not, however, be obviated by the nonpublication of sporadic cases of cholera. The discontinuance of such publications, though it might everywhere be considered permissible, would, moreover, tend to shake the confidence of the foreign governments in the reliability of the sanitary reports issued from here and also cause such governments to issue precautionary regulations, which at present have none in force, because their representatives here are informed in detail of all occurrences regarding cholera cases.

The cholera commission of the Senate will therefore continue, as soon as a case of Asiatic cholera has been ascertained, to publish the same without delay. It will, however, be seen to that the circumstances of the case, particularly the day of falling sick, are reported in the

publication.

AD. 1. The remark contained in the petition that the case reported on March 4 had eventually proved not to have been cholera must be considered as an erroneous one. The publication was, moreover, only made after the proper medical experts had ascertained that it was a case of cholera.

C. BRANDIS, DR.

Cholera in Lorient, France.

UNITED STATES CONSULATE, Nantes, March 30, 1893.

SIR: I have the honor to inclose herewith the sanitary report from Lorient for the week ending March 26, 1893, "inclusive." An official report received from Brest shows the sanitary condition of the department of Finistere to be good. A few isolated cases of cholera have been reported from Briec, but there is no fear of the epidemic spreading. There is no cholera at Nantes.

I am, sir, your obedient servant.

H. DE SALLIER DUPIN, United States Consul.

To the Hon. WILLIAM F. WHARTON, Assistant Secretary of State.

[Inclosure.]

Week ended March 26, 1893. Lorient, town, 152 cases, 9 deaths; Lorient, district, 52 cases, 15 deaths.

Denial of newspaper report of cases of cholera at Winnipeg, Manitoba.

WINNIPEG, MANITOBA, April 17, 1893.

There is no foundation for rumor of cholera. There is one case of smallpox that came from steamship *Vancouver*. It was at once and is now perfectly isolated and all on train quarantined.

T. GRAHAM PHILLIPS. T. W. TAYLOR, Mayor.

To the Supervising Surgeon-General M. H. S.

Denial of reported cases of cholera in St. Petersburg, Russia.

LEGATION OF THE UNITED STATES, St. Petersburg, March 7, 1893.

SIR: Much elaborate misinformation regarding Russian affairs reaches the press of western Europe, and it is not unlikely that a recent rumor here may have taken the shape of a definite statement in London and Paris. This rumor was to the effect that there were recently over thirty cases of cholera in St. Petersburg during a single day.

A very careful and extended inquiry at several of the most trustworthy sources of information has convinced me that this report is utterly groundless, and that since the epidemic in the Vassile Ostroff suburb referred to in my No. 34 of January 7 there has been not one

well-authenticated case in this city.

In conversation with the prefect of St. Petersburg a few nights since, I learned that the authorities fully expect cases of cholera in the spring, but that they are taking every precaution, the city being divided into small sanitary districts, each with a corps of inspectors and physicians, supplied with the same means and allowed the same powers, which enabled them to stamp out the disease in the Vassile Ostroff, and that all is kept under the supervision of the Imperial Institute of Experimental Medicine, to which, with its advanced scientific methods, I

alluded in the dispatch above referred to.

The only feature in the whole situation which occasions serious forebodings is the persistence of cholera in some of the southern, central, and western provinces of European Russia. In these the condition of the people, weakened by long-continued famine, too ignorant to be readily influenced by printed information, and too superstitious to rely on much save supernatural intervention, tends to make the task of the sanitary authorities especially difficult. But the Imperial Government seem grappling vigorously with these difficulties there as well as here. Sanitary conferences of experts have been held in St. Petersburg and elsewhere which have formulated plans of work and codes of sanitary The ministry of the interior has been sending men and disinfecting material into the distressed districts, and to the governments of Bessarabia and Padolia, where the disease has shown itself especially virulent and persistent, one of the most eminent experts has been sent with full means to investigate causes and suggest remedies. Far-sighted measures have been taken, also, as regards hospitals, corps of trained nurses, and the like.

Naturally, as it is from these provinces that emigration mainly flows westward, their sanitary condition is a matter of special importance to

other nations.

Unfortunately trustworthy information regarding these parts of the Empire is difficult to secure.

I am, sir, your obedient servant,

ANDREW D. WHITE.

To the Hon. SECRETARY OF STATE.

Sanitary Commission at Constantinople—Report of the United States sanitary commissioner.

[Report No. 64.]

It was announced at the last sitting of the International Sanitary Commission of the 21st instant, that the plague is raging in Benghazi in Cyrenaica. Throughout the province of Tripoli, in Africa, the crops failed last year, and as a natural consequence now famine and

plague exist.

It is to be regretted that we have no official notice or news of what occurs in that famine and plague stricken province. The sanitary physician at Benghazi has not given any sign of his existence; perhaps he is already dead as well as the governor of the province and the cadi, or the religious judge. We know of these latter deaths by the report of the French consul at Tripoli and by private letters. There has been only one official notice of something wrong happening there, and this was a telegram of the general governor of Tripoli in Africa, complaining that the government of Malta had ordered a quarantine of fourteen days against Tripoli, though the existing disease in that province was typhus according to the above governor of Tripoli. It seems that province has been a long time in a wretched condition. It is stated that the bodies are buried so shallow that dogs exhume them and carry them all along the streets.

A large number of the population has already emigrated, and it has been reported that at Beirut, in Syria, spotted typhus broke out in consequence of the immigrants from Tripoli, in Africa. The sanitary physician at Tripoli has been ordered to go to Benghazi, and he will start when he can. It must be known that in Cyrenaica there do not exist regular communications. The communications are by sailing or steam vessels with Malta or Crete.* The mail, too, is carried by these

shins.

The International Sanitary Commission has ordered ten days' quar-

antine against the arrivals of Cyrenaica.

In the capital there exist many cases of influenza whose prevalent symptoms are sore throat.

S. C. ZAVITZIANO.

CONSTANTINOPLE, March 23, 1893.

Smallpox in Antwerp, Belgium.

UNITED STATES CONSULATE, Antwerp, April 5, 1893.

SIR: I have the honor to confirm the following cablegram sent this day:

"Surgeon-General Wyman: Smallpox prevails in Antwerp. Rose-nau."

During the week March 19-25, 1893, there were 73 cases of the disease treated at the city hospitals, with a death rate of 13. The cases began to appear during the latter part of February, 1892, and have steadily increased in number since. The following figures are taken from the weekly reports received at this office from the city authorities:

For the week ended—	Total deaths.	Cases under treat- ment at the city hospitals.	Deaths at the city hospitals.
November 26	3 4 2 5 9	16 18 19 28 17	3 3 2 4 6
January 1	9 5 11 11 9 19 17 17 21 20 6 9 13	14 41 57 76 78 87 73 73 85 68 64 74 73	6 1 7 9 5 10 10 14 11 6 2

The number of cases at the city hospitals almost justifies the conclusion that the disease at present exists at this port in epidemic form. This fact will be kept in view when passing immigrants. Further details will be reported again.

Very respectfully, your obedient servant,

M. J. ROSENAU, Assistant Surgeon, M. H. S.

To the Supervising Surgeon-General M. H. S.

Smallpox and typhus in Mexico.

DEPARTMENT OF STATE, Washington, April 12, 1893.

SIR: I have the honor to inform you that this Department is in receipt of a telegram of the 11th instant from the consul-general at

Nuevo Laredo, in the following words:

"There are cases of smallpox along line of National Railway. Typhus still prevalent in interior cities, with two suspicious cases in this city; besides, there is always risk of cholera via Gulf or Pacific ports of Mexico." * * *

I have the honor to be, sir, your obedient servant,

W. Q. GRESHAM.

To the Hon. SECRETARY OF THE TREASURY.

Typhus fever in Mexico.

The following report has been received from the United States sanitary inspector at Eagle Pass, Tex., dated April 8, 1893:

Since my last report all trains coming from Mexico have been inspected without finding anything of suspicious nature. Typhus fever

is reported at Durango, Mexico, and smallpox at Monterey, Mexico, but am unable to learn how many cases or what steps are being taken to isolate them.

Quarantine declared by the governor of Texas against the Gulf Coast and
Mexico.

Under date of April 7, 1893, the United States sanitary inspector at El Paso, Tex., reports as follows:

I have the honor to report that the governor of the State of Texas has issued a proclamation quarantining the Texas Gulf coast and the Rio Grande border after May 1. It applies to all vessels, persons, and articles from places infected with cholera, yellow fever, or smallpox, and extends to all places south of the twenty-fifth degree of latitude which are not free from infection.

Vessels suspected are to be subjected to the usual processes of purification, such as fumigation and shifting the cargo, pumping out bilge water, etc. Vessels having yellow fever on board will not be allowed to cross the bar without special permit of the State health officer.

Disinfection of rags at Stettin, Germany.

UNITED STATES CONSULATE, Stettin, March 25, 1893.

SIR: In order to test the efficacy of the disinfection of rags by means of sulphurous-acid gas, as prescribed by the circular of the Treasury Department under date of August 19, 1892, Dr. G. Laube, a sworn expert analytical and technical chemist at the royal court of this city, and I, who have had much experience as a former pupil of the eminent analytical chemist, Geheimhofrath Prof. Dr. R. Fresenius, of Weisbaden, Germany, in analytical work, made recently a series of qualitative and quantitative analyses of disinfected rags which had been disinfected by the different rag exporters of this city under our personal direction and supervision. The disinfection of rags is and has always been made in the evening.

The rags, after the disinfecting rooms are closed and sealed by Dr. Laube and myself, are left exposed during the night to the sulphurous-acid fumes. Previous to the disinfection, the rooms are made, as far as possible, air-tight.

The samples of disinfected rags we examined and tested qualitatively and quantitatively were collected in the morning after the disinfection had taken place and after the rooms had been aired. The samples were taken as follows:

- (1) From racks which are parallel to the floor, elevation \(\frac{1}{2} \) to 1 foot.
- (a) From the interior of the rag piles.(b) From the exterior of the rag piles.
 - (2) From racks which are parallel to the floor, elevation 3 to 8 feet.
- (a) From the interior of the rag piles.
- (b) From the exterior of the rag piles.

Preparation of the samples for the qualitative analysis.

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Two hundred and fifty grams of each sample were macerated with 1,000 grams of water in glass vessels. The percolate thus obtained measured 200 cubic centimeters, which represented 50 grams of disinfected rags. To this 200 cubic centimeters of percolate 5 cubic centimeters of dilute sulphuric acid were added, transferred into a retort, and by means of a Liebig condensor distilled until the distillate amounted to 150 cubic centimeters. To this 50 cubic centimeters of water were added, increasing the volume of the liquid to 200 cubic centimeters, which was used for the tests as follows:

Chemical tests of sulphurous acid SO₂ (the smell of SO₂ gas was distinctly present).

(1) Reaction upon metallic zinc plus dilute muriatic acid, which caused sulphureted hydrogen gas to be generated. Proof of test with lead paper, causing the same to become brownish black in color.

(2) Reaction upon nitrate of silver solution, causing a white, cheesy precipitate of Ag₂SO₃, which on boiling turns gray, caused by the precipitation of metallic silver.

(3) Reaction upon sulphureted hydrogen gas, causing a milky white coloring of the liquid, due to the precipitation of sulphur.

(4) Reaction upon chloride of gold, causing on boiling a purplebrown precipitate of metallic gold.

(5) Reaction upon mercuric nitrate, causing on boiling a gray pre-

cipitate of metallic mercury.

The above reactions were obtained readily from each sample of disinfected rags tested, while a counter-test of samples of nondisinfected rags gave none of the above characteristic reactions of sulphurous acid.

QUANTITATIVE ANALYSIS.

These analyses were made to ascertain the quantity of sulphurous acid absorbed by the samples of disinfected rags examined. The preparation of the samples was made in the same manner as for the qualitative analysis; 250 grams of each sample were collected. The percolates were distilled until the several distillates amounted to each 100 grams, which represented 25 grams of disinfected rags. Each 100 grams distillate was treated with permanganate of potassium solution (titration method) of such a concentration that 1 cubic centimeter of the solution would neutralize 0.005 gram of sulphurous acid.

The following results were obtained:

(A) Samples taken from racks which are parallel to the floor elevation, $\frac{1}{2}$ to 1 foot.

Sample No. 1, from the interior of the rag piles, contained 0.026 gram SO₂ in 25 grams rags.

Sample No. 2, from the exterior of the rag piles, contained 0.042 gram SO_2 in 25 grams rags.

(B) Samples taken from racks which are parallel to the floor, elevation 3 to 8 feet.

Sample No. 3, from the interior of the rag piles, contained 0.038 gram SO_2 in 25 grams rags.

Sample No. 4, from the exterior of the rag piles, contained 0.058 gram SO_2 in 25 grams rags.

(C) Samples taken from racks which are parallel to the floor elevation, \(\frac{1}{2}\) to 1 foot from the interior of the rag piles.

Sample No. 5 contained 0.068 gram SO_2 in 25 grams rags. Sample No. 6 contained 0.026 gram SO_2 in 25 grams rags. Sample No. 7 contained 0.047 gram SO_2 in 25 grams rags. Sample No. 8 contained 0.046 gram SO_2 in 25 grams rags. Sample No. 9 contained 0.034 gram SO_2 in 25 grams rags.

(D) From the exterior of the rag piles.

Sample No. 10 contained 0.070 gram SO_2 in 25 grams rags. Sample No. 11 contained 0.048 gram SO_2 in 25 grams rags. Sample No. 12 contained 0.105 gram SO_2 in 25 grams rags. Sample No. 13 contained 0.085-gram SO_2 in 25 grams rags. Sample No. 14 contained 0.049 gram SO_2 in 25 grams rags.

The above results show that the disinfections of the rags from which the samples were taken were effective. A better control, however, of the rags disinfected by means of sulphurous-acid gas can best be obtained by having rags first baled and then disinfected in vacuum.

For obvious reasons, the disinfection of rags on this side, by means of superheated steam or boiling water, is impracticable. These two methods are better adapted for those disinfections made in the ports of entry in the United States.

I have the honor to be, sir, your obedient servant,

JAMES C. KELLOGG, United States Consul.

To the Hon. WILLIAM WHARTON,
Assistant Secretary of State.

Vessels leaving Bordeaux and other consular ports for the United States without obtaining bills of health at ports of departure.

UNITED STATES CONSULATE, Bordeaux, March 23, 1893.

SIR: I beg to direct your attention to the fact that only a small proportion of the vessels and steamers leaving Bordeaux and other ports in this consular district for, and subsequently reported as having arrived and entered ports in the United States, obtain from this consulate a bill of health or the certification of their manifests, as required by the law and the consular regulations. The cause of this is due, I believe, to the carelessness and negligence of the officers of the ports of New York and Philadelphia, where most of the vessels go, in not demanding and exacting from the ship the said papers. In case of an outbreak in this district of a contagious or infectious disease, it would be at our country's risk and peril that such a large number or any

ships should be allowed to enter a port in the United States from this district without a consular bill of health and having complied with the

Treasury and quarantine regulations of the United States.

If these vessels do not obtain the consular papers it is because their agents here know they have not been and will not be required by the officers of the ports in the United States, and so long as this is true I am powerless, and can only call your attention to the matter that I may be spared from unjust and unreasonable blame in case of unfortunate consequences in the future.

I have the honor to remain, your obedient servant, HORACE G. KNOWLES. United States Consul.

To the Hon. Assistant Secretary of State.

The attention of collectors of customs is hereby called to the above report, and to the provisions of sections 1 and 2 of the act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service, approved February 15, 1893.

Officials of the Marine-Hospital Service at the Canadian quarantines by special permission.

OTTAWA, April 4, 1893.

SIR: Mr. J. B. Lynch, an officer of this Department, has written to me from Washington to say, as a result of an interview with you, you desired that United States quarantine officers acting under your instructions should be allowed to be present at Grosse Isle or other Canadian quarantine stations, in order to witness, for the purpose of report to you, the proceedings in relation to the disinfection or quarantining of vessels, persons, cargo, or passengers' luggage at such stations.

I communicated this request to the minister of agriculture, who is charged with the administration of the Canadian quarantines; and he has consulted with colleagues on the subject, with the result that I am authorized to say to you there will be no objection to afford the facility

I am further to intimate, it is hoped that similar facilities will be afforded to quarantine officers of this department at the United States quarantine stations if such should be desired and requested.

I have the honor to be, sir, your obedient servant, J. Lowe,

Deputy Minister of Agriculture.

To the SUPERVISING SURGEON-GENERAL M. H. S.

Report of Canadian quarantines.

OTTAWA, April 12, 1893.

SIR: In further reference to a request made by Mr. Lynch, I send to you herewith a précis of the Canadian quarantine stations and regulations for information, in view of the natural interest of the United States in all action of this nature by the Canadian Government.

I have the honor to be, sir, your obedient servant,

Deputy Minister of Agriculture.

To the Supervising Surgeon-General M. H. S.

[Inclosure.]

A précis: Canadian quarantine stations and regulations.

THE STATIONS.

The chief Canadian quarantine stations on the eastern seaboard of the continent are Grosse Isle, Quebec; Halifax, Nova Scotia; and St. John, New Brunswick.

The minor regularly organized quarantines are Sydney, Cape Breton; Charlottetown, Prince Edward Island; Chatham, New Brunswick; Pictou, Nova Scotia; and Hawkesbury, Nova Scotia.

All other seaports, on both oceans, are classified as unorganized quarantine stations, of which the collector of customs is quarantine officer.

On the Pacific coast, Williams Head, in the Strait of Fuca, a point which all vessels must pass entering from the Pacific Ocean, to reach any of the present settled parts of British Columbia, is a quarantine station of the first class, and is now being equipped as such. The quarantine station at Albert Head, which is now attached to Williams Head, had been hitherto only maintained as a cadre.

THE REGULATIONS.

The Canadian quarantine law, the regulations and the practice thereunder, at all quarantine stations, require—

(a) That every vessel shall be inspected, and every vessel subject to quarantine from cause of sickness or coming from an infected country, shall, with its crew, passengers, luggage, or cargo, be detained for disinfection, or observation, according to circumstances, for a period not less than that of the incubation of the disease quarantined against, from the date of the last contact.

(b) The thorough disinfection of clothing, luggage, dunnage, cargo, and vessel is required before pratique is given or landing permitted.

At the unorganized quarantine stations of the Dominion the duty of the customs collector, who is the quarantine officer, is, in case a vessel arrives with sickness, to cause a medical inspection, and immediately telegraph the facts to the Department.

Pratique would be refused by the collector to a vessel arriving with any serious contagious disease. A vessel in such case would be sent to the nearest organized quarantine station to be dealt with.

Protection against the entry of disease is thus afforded at every maritime port of the Dominion.

The regulations applying to unorganized maritime ports also apply to every inland port of the Dominion, including points at which all railways cross the frontier, from the Atlantic to the Pacific.

As respects the inland ports, it is hoped that reasonable reliance may be placed on the maritime sanitation regulations and appliances of the United States to prevent Asiatic cholera or other serious disease entering on the United States seaboard of the continent. But if this hope should not prove to be well founded, and Asiatic cholera should find lodgment, the most active exertions will be made in Canada at points where railways cross the frontier in order to prevent the entry of the disease into Canada, even at the cost of interrupting passenger or other traffic.

DISINFECTING IMMIGRANTS' LUGGAGE.

All immigrants' luggage arriving during the approaching season of St. Lawrence navigation will be disinfected at the Louise Embankment, port of Quebec. All articles capable of being passed through the steam disinfector will be, and all other articles disinfected by means of sulphur or solution of bichloride of mercury.

The Louise Embankment is a substation of Grosse Isle, and the medical superintendent, Dr. Montizambert, must be satisfied with the dis-

infection.

DETAILS OF THE STATION.

Grosse Isle, situated about 30 miles below Quebec, at a point where the river St. Lawrence is 6 or 8 miles wide, has an area of about 700 acres, enabling the station to be divided into sick and healthy districts. The island is provided with wharves for the accommodation of each of the districts. The wharves, however, are not in sufficiently deep water to enable modern steam vessels of the largest class to moor. Lighterage is, therefore, effected by means of two attendant steamers, the *Challenger* and the *Druid*. On one of these is affixed the sulphur-dioxide blast and the mercuric drench for disinfecting the holds of vessels. Steam is also used for disifecting compartments of vessels, when such compartments are not too large for the application of this mode.

Grosse Isle is fitted with three iron disinfecting steam chambers 25 feet by 8 feet 6 inches by 8 feet 6 inches, of the latest type and appliances, consisting of electric contact thermometers with gongs, automatic registering dials, luggage wagons to run to and fro from the end of the pier to the disinfecting house, galvanized-iron wire trunks fitted with locks and keys to prevent mixing or loss of passengers' clothing in process of being disinfected. The disinfecting appliances on the island also provide for the application of sulphur fumes and washing or sprinkling with solution of bichloride of mercury all articles which

can not be put into the steam chambers.

The island is well supplied with buildings for hospitals, for detention of first, intermediate, and steerage passengers, residence for the quarantine staff and clergymen stationed on the island, churches, shelter buildings for disinfecting appliances, and a bacteriological laboratory; also with good water for drinking purposes, baths, closets, etc.

No vessel is allowed to pass Grosse Isle before receiving pratique from the medical superintendent, nor until he is satisfied that such

vessel can with safety to the public health of Canada do so.

The staff consists of Frederick Montizambert, M. D., F. R. S. C., D. C. L., superintendent of St. Lawrence quarantine; two medical assistants, to be increased as necessity requires, and an adequate number of other assistants.

The Halifax Quarantine Station, on the Atlantic seaboard, is next in importance to that of Grosse Isle during the summer months, and of chief importance during the winter, when the St. Lawrence navigation is closed. It is situated on Lawlor Island, at the entrance of the harbor at Halifax. The station is being refitted, and a deep-water wharf being built to which vessels of large class can be moored. It is fitted with hospital buildings, detention buildings, residences for the staff, etc., pure water supplies, and disinfecting appliances of the same modern and improved type and character as those described at Grosse

Isle, with the exception that one large iron disinfecting chamber instead of three is considered to be sufficient for this point, in view of the

number of passengers arriving.

During the present winter the

During the present winter the disinfecting appliances have been affixed to a ferry steamer, employed for the purpose, the Sir C. Ogle, pending the refitting of the station and construction of a deep-water wharf at Lawlor Island. The Sir C. Ogle has affixed to it an iron steam disinfector of modern and improved type, but smaller pattern than the iron chamber built for and to be placed on Lawlor Island, also the dioxide blast and the mercuric drench.

As respects immigrants' luggage arriving at that port, its disinfection takes place under the superintendence of Dr. W. N. Wickwire, the quarantine officer, and his assistants. The processes of steam, the application of sulphur fumes by the dioxide blast, and solution of the bichloride of mercury, are severally used. Dr. Wickwire reports to the department that the disinfecting operations have been watched by officers of the United States consular and quarantine service, with the result that they have found them to be satisfactory.

No vessel receives pratique at Halifax except on the certificate of Dr. Wickwire, the medical quarantine officer, nor until he is satisfied that such can be granted with safety to the public health of the Do-

minion.

The quarantine station at Partridge Island, St. John, New Brunswick, comes next in importance to Halifax. It has in every respect the same appliances, but on a smaller scale, adapted to a calculation of the requirements of the station.

The minor yet regularly organized quarantine stations above named have fittings to meet the requirements of the class of sailing vessels.

Very few, in some cases no passengers, land at those ports.

On the Pacific coast of the Dominion in the Strait of Fuca, at Williams Head, the quarantine station now being equipped is situated on a point of land jutting into the strait, of an area of about 100 acres. It is in all respects convenient for all vessels entering the province from the Pacific Ocean through the strait.

It is to be fitted with a deep-water wharf to which vessels of large class can be moored, and also with detention buildings, hospital buildings, buildings for the residences of the staff, and shelter buildings for

the disinfecting appliances.

The disinfecting apparatus will consist of one large iron steam chamber of similar size and pattern to that at Grosse Isle, with, in addition in all respects, similar modern and improved appliances to those in use at Grosse Isle, as above described.

J. Lowe, Deputy Minister of Agriculture.

OTTAWA, April 7, 1893.

Halifax Quarantine-Report by Passed Assistant Surg. Charles E. Banks.

HALIFAX, NOVA SCOTIA, April 17, 1893.

SIR: For the past ten days the people of this city have been gradually growing impatient with the increasing influx of immigrant steamers which have lately been making this port, as alleged in the April 21, 1863. 250

public press, and with good foundation, a dumping ground for aliens bound to the United States. It is undoubtedly true that this place is selected because of lax quarantine requirements and to avoid possible and probable detention at American ports, as many of the steamers land their immigrants here and then proceed to the ports of Boston, New York, and Baltimore. The city authorities have objected to the landing of these immigrants on the wharf before disinfection, particularly as they have been permitted to leave the steamer sheds and wander through the streets of the city while awaiting forwarding by rail. The general public has also been allowed to enter the landing-pier sheds and mingle with the immigrants without hindrance.

This state of affairs has been commented on daily by the public press, and the protests caused the city authorities to take some action. At first the police were directed to prevent the public from entering the immigration sheds. This was carried out, but the immigrants were not prevented from leaving their inclosures and walking about the city while waiting for trains. Then the police were directed to prevent this part of the trouble. It was accomplished with indifferent success. Finally, on Saturday, 15th instant, the mayor called a special meeting of the city council, to which were invited prominent citizens, steamship agents, physicians, and lawyers. As a result of the deliberation, the council voted that hereafter no steamship carrying immigrants should be permitted to land its passengers until the baggage and effects had been disinfected. While there was some legal doubt expressed as to the power of the city to enforce this act upon the steamship docks, which are Dominion property, and while the minister of the interior clearly showed his disapproval of it by a telegram to the mayor, as per inclosed clippings from the morning papers, yet the port physician, Dr. Wickwire, a Dominion official under the minister of agriculture, thought it best to conform to the local feeling as shown by these decided resolutions, and at once set about to provide for the emergency.

The quarantine station at Lawlor Island has no outfit whatever for dealing with ships, although money has been appropriated for preparing it. An old hulk was immediately secured, made tight, racks fitted between decks, and she was towed alongside the first arrived steamer, which reached here a few hours after the city council had acted. The steamer Sir C. Ogle, with its sulphur furnace, made connection with the old hulk through pipes laid between decks, and burned the necessary quantity of sulphur to fumigate the effects of about 1,000 steerage passengers which were stowed in the space. After six hours had elapsed the hatches were opened, and the steamer proceeded to her dock this morning, having been detained about thirty-six hours under

this arrangement.

A large majority of the immigrants were from England, Norway, Sweden, and Denmark, and are reported by the ship's surgeon to have been a remarkably healthy lot. No sickness on the voyage. A few were from Russia. As there were no facilities for steam disinfection, except in a very limited way, this lot goes through with certificates of sulphur fumigation only. The new order of things places the disinfection of immigrants where it belongs, if I may express myself about the methods of a foreign government, namely, in the hands of the quarantine officer of the Dominion. * * *

To the Supervising Surgeon-General M. H. S.

Quarantine measures at Grosse Isle and Halifax.

[Telegram.]

APRIL 21, 1893.

Dr. MONTIZAMBERT,

Ottawa, Ontario, Canada:

Thanks for telegram received. Kindly inform me as to practice at Grosse Isle this season. Will the baggage of all immigrants be disinfected? If not, what baggage will be excepted? When does quarantine begin at Grosse Isle?

WYMAN, Surgeon-General.

OTTAWA, ONTARIO, April 21, 1893.

Dr. WALTER WYMAN, Washington, D. C.

All luggage of immigrants will be disinfected this year whether arriving in healthy or infected vessels. Season's quarantine commenced; first vessel arrived yesterday.

F. MONTIZAMBERT.

Disinfection of immigrants' baggage bound for United States at the Halifax Quarantine Station.

[Telegram.]

HALIFAX, NOVA SCOTIA, April 21, 1893.

Surgeon-General WYMAN, Washington, D. C.:

American baggage, trunks, boxes opened and contents spread on racks.

BANKS,
Passed Assistant Surgeon.

[Telegram.]

Washington, D. C., April 21, 1893.

Dr. BANKS.

United States Consulate, Halifax, Nova Scotia:

Is baggage other than American fumigated without being opened and spread on racks?

WYMAN, Surgeon-General.

HALIFAX, NOVA SCOTIA, April 22, 1893.

Surgeon-General WYMAN, Washington, D. C:

Canadian not opened.

BANKS.

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Arrival at Rotterdam, Netherlands, of medical officer of the Marine-Hospital Service.

> UNITED STATES CONSULATE. Rotterdam, Netherlands, March 31, 1893.

SIR: I have the honor to report that I arrived here to-day, and have

presented my credentials to the United States consul.

The new regulations will have been posted at this port the required ten days on Monday next. One vessel of the Royal Netherlands Line sails to-morrow, which I will unofficially inspect. The official inspection will begin with the next vessel, and report will be made of same.

Very respectfully.

R. M. WOODWARD, Passed Assistant Surgeon, M. H. S.

To the Supervising Surgeon-General M. H. S.

BAHAMAS.—Dunmore Town.—Two weeks ended March 31, 1893. Population, 1,472. One death.

Green Turtle Cay-Abaco.-Two weeks ended March 28, 1893. Population, 3,286. One death.

CUBA-Havana.-Under date of April 8, 1893, the United States sanitary inspector reports as follows:

There were 524 deaths in this city during the month of March, 1893. Five of those deaths were caused by yellow fever, 16 by enteric fever, 1 by bilious fever, 9 by so-called pernicious fever, 3 by paludal fever, 24 by diphtheria and croup, and 1 by glanders.

During the week ending April 6 there were 136 deaths, 4 of which were from yellow fever (with approximately 10 new cases), 6 were caused by enteric fever, 1 by so-called pernicious fever, and 5 by diph-

theria and croup.

GREAT BRITAIN—England and Wales.—The deaths registered in 33 great towns of England and Wales during the week ended April 1 corresponded to an annual rate of 21.2 a thousand of the aggregate population, which is estimated at 10,322,429. The lowest rate was recorded in Swansea, viz, 12.8, and the highest in Bolton, viz, 29.8 a thousand.

London.-One thousand seven hundred and thirty-two deaths were registered during the week, including smallpox, 5; measles, 30; scarlet fever, 30; diphtheria, 36; whooping cough, 61; enteric fever, 6; and diarrhea and dysentery, 9. The deaths from all causes corresponded to an annual rate of 21.0 a thousand. Diseases of the respiratory organs caused 421 deaths. In greater London 2,182 deaths were registered, corresponding to an annual rate of 19.5 a thousand of the population.

In the "outer ring" the deaths included diphtheria, 15, and scarlet fever. 9.

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Ireland.—The average annual death rate represented by the deaths registered during the week ended April 1 in the 16 principal town districts of Ireland was 26.6 a thousand of the population. The lowest rate was recorded in Lisburn, viz, 8.5, and the highest in Waterford, viz, 47.5 a thousand. In Dublin and suburbs 187 deaths were registered, including scarlet fever, 1; enteric fever, 5; whooping cough, 2; typhus, 1; and diphtheria, 1.

Scotland.—The deaths registered in 8 principal towns during the week ended April 1 corresponded to an annual rate of 22.7 a thousand of the population, which is estimated at 1,447,500. The lowest mortality was recorded in Greenock, viz, 15.8, and the highest in Glasgow, viz, 26.8 a thousand. The aggregate number of deaths registered from all causes was 639, including smallpox, 1; measles, 60; scarlet fever, 5; diphtheria, 4; whooping cough, 17; fever, 5; and diarrhea, 8.

St. Helena.—Eight weeks ended March 13, 1893. Population, 3,877. Total deaths, 11. No deaths from contagious diseases.

West Indies—Turks Islands.—Three weeks ended March 22, 1893. Population, 4,744. Total deaths, 13. No deaths from contagious diseases.

MORTALITY TABLE, FOREIGN CITIES.

Cities.		Estimated popula	from		Deaths from-									
	Week ended.		Total deaths i	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping		
London	Mar. 18	5, 849, 104	1,969			5		5	35	74	39			
Paris	Apr. 1	5, 849, 104 2, 424, 705 1, 435, 931	1,269		*****	5	*****		8	34	15	2		
Vienna	Mar. 11	1, 435, 931	708	*****	*****	*****	*****		*****		27	****		
CalcuttaGlasgow*	Mar. 4	681, 560	308 349		*****	1	*****	2	3	2	*****			
Hamburg	Apr. 1 Mar. 11	677, 883 620, 000	209		*****	****	*****	2	3	4	*****	*****		
Hamburg	Mar. 18	620,000	193			*****	*****	-1	3	3				
Liverpool	Apr. 1	517, 980	235	*****	*****		3	1	2	1				
Brussels	Mar. 25	482, 158	193				*****	5	*****	3	*****			
Amsterdam Cairo	Apr. 1 Mar. 16	439,002	157 324	1	*****	1	*****		*****	5 2	*****	****		
Odessa	Mar. 16 Mar. 25	315 900	147		******	i	******	*****	2	8	1			
Cologne	Apr. 1	374, 838 315, 900 298, 732	166	*****						12	2			
Edinburgh	Apr. 1	267, 672	85	*****	*****				1	2		1		
Palermo	Mar. 25	250,000	105	*****	*****	*****	*****	1	*****	4	*****			
Alexandria Bremen	Mar. 16 Mar. 25	231, 396	122			*****				3	*****	1		
Rotterdam	Apr. 1	227,000 222,230	123			*****				0		-		
Hanover	Mar. 25	191, 400	56			*****				3		1		
Frankfort-on-the-Main	Mar. 18	185,000	59			*****				4				
Frankfort-on-the-Main	Mar. 25	185,000 182,538	74				*****			6	*****			
Prague	Mar. 25	182, 538 181, 835	130 109	*****	*****	-	****		*****					
Venice	Apr. 1 Mar. 25	163, 326	99		*****	*****		1	******	6	2	****		
Crieste	Mar. 25	158, 054	80			1	******		1	4	*****			
Thent	Apr. 1	153, 290	72			*****								
Nuremberg	Mar. 18	151, 393	68	*****	*****		*****	*****		5	*****			
Funchal	Mar. 25	140,000	13 51		*****	*****			*****	2	*****	1		
Stettin	Apr. 1 Mar. 25	139,659 120,000	52	*****	*****	*****	*****	*****	1	2				
Crefeld	Apr. 1	108,000	78	*****			*****			3	*****	1000		
Aix-la-Chapelle	Mar. 25	107, 428 105, 800	51		*****			*****						
othenburg	Mar. 25	105, 800	35			*****								
Mannheim	Mar. 18 Mar. 25	104, 406- 80, 000	47 37			*****		*****		9	4			
Layence	Mar. 25	72, 281	32					*****	1	4	2			
Leith	Mar. 25	70, 972	24	******		*****	1		1	i	*****			
eith	Apr. 1	70, 972	28			*****			1					
lerez de la Frontera	Mar. 18	61,708	32	*****	*****	*****	*****		*****	1	*****			
Port of Spain	Mar. 11 Mar. 18	50,000 50,000	27 35	*****	*****			1	*****		*****			
Port of Spain	Mar. 25	50,000	45	*****	*****	*****	******	i	*****	*****	*****	*****		
Marsala	Mar. 25	40, 131	22							*****				
Gibraltar	Mar. 26	25, 755	10	*****	*****									
chiedam	Apr. 1	25, 533	9	*****		*****	*****	*****	*****	*****	*****			
Firgenti	Mar. 25 Apr. 8	23, 847	9		*****	*****	*****	*****	*****		*****			
Kingston, Canada,	Apr. 7	19, 264	14	*****	*****	*****	*****	*****	*****	*****	*****	****		
Kingston, Canada	Apr. 1	18, 100	11											
sagua la Grande	Apr. 8	18, 109	10			*****				*****	*****			
Intigua	Mar. 4	16, 664 16, 664	13	*****	*** -**	*****	******	*****	*****			****		
Antigua	Mar. 11 Mar. 18	16, 664	18		*****	*****	*****	*****	****		*****	****		
Antigua	Mar. 25	16, 664	14							******				
lushing	Apr. 1	14,000	6	*****	*****	*****	*****	*****						
onneberg	Mar. 26	12,000	3											
Sonneberg	Apr. 2	12,000	9		*****			*****						
luelph Queenstown	Apr. 8	10, 539 10, 340	6			*****								
ruxpan	Apr. 1	10, 280	5	*****	*****	*****	*****	*****	*****	*****	*****	****		
Chatham	Apr. 8	10,000	5	*****	*****		*****							
Sarnia	Apr. 8	7,000	1	*****										
Coaticook	Apr. 8	2,000	2 2	*****			*****				*****			
mi ounii dei Morie	Mar. 18	000	2	*****	*****		*****	*****	*****	*****		****		

* There were 104 cases of smallpox in hospital on April 1, 1893.

By authority of the Secretary of the Treasury:

WALTER WYMAN, Supervising Surgeon-General Marine-Hospital Service.